



Oregon

Tina Kotek, Governor

Department of Transportation

Technical Leadership Center
ODOT Bridge Section MS #4
4040 Fairview Industrial Dr. SE
Salem, OR 97302

October 31st, 2024

To: Users of Oregon DOT Bridge Design Manual

Subject: Revisions to the ODOT Bridge Design Manual

The BDM has been updated with multiple technical revisions. See the attachment for an update summary. The revised BDM and format guide are being released in web-based Acrobat files, which can be accessed at the following web site:

<http://www.oregon.gov/ODOT/Bridge/Pages/Bridge-Design-Manual.aspx>

The revised BDM can be viewed from the site or downloaded and printed. The documents are also available on Projectwise.

These revisions apply to new design projects as of the effective date of January 1st, 2025. New projects for in-house designs are those that do not have an approved DAP by the effective date. New projects for outsourced projects are those that do not have an executed work order contract for PE. However, existing projects may make use of these revisions, if agreed to by the Agency Project Manager or Project Team Leader.

We would like to thank the many people who provided comments and suggestions for this BDM update. Please send comments or suggestions for the April 2025 BDM to Emily Clyburn at: emily.clyburn@odot.oregon.gov

Raymond BOTTENBERG
Raymond BOTTENBERG (Oct 29, 2024 13:59 PDT)

Raymond Bottenberg
State Bridge Engineer

Attachment: BDM Update Summary October 2024

October 2024 Update
[ODOT Bridge Design Manual](#)
Update Summary

The following revisions are in reference to current BDM section numbers:

Section 1 – Design Standards and Practices

- 1.2.1.2 Clarified bridge rail standard drawing revisions require a design exception, not design deviation.
- 1.2.3 Moved structural concrete deck inlays from Bridge Retrofit to Bridge Preservation design category.

Added bearing replacements to Bridge Retrofit Category.
- 1.2.3.6 Required Local Public Agency projects on the NHS, instead of NBI, to submit bridge design deviations.
- 1.3.2 Added lightweight concrete to the concrete unit weight dead loads.
- 1.5.1 Revised language around internally curing concrete to encourage use.
- 1.5.6.1 Updated prestress losses reference materials.
- 1.5.6.2.8 Relocated section so diaphragm beam design requirements are not interpreted for PC/PS concrete girder bridges only.
- 1.5.12 Moved section 1.5.6.2.8 to this newly created section and clarified diaphragm beam design requirements.
- 1.8 Reformatted to two columns.
- 1.9.2.1.2 Revised wording to clarify when custom deck design is required.
- 1.9.3.1 Removed requirement for a design deviation to use HESC as an overlay material.
- 1.9.3.1.6.1 and 1.12.1 Added requirements for waterproofing membranes on culverts.
- 1.9.3.1.7 Moved section 1.9.4.6 to this newly created section so all deck overlay discussion is together.
- 1.10.5 Removed information that is duplicated in the Geotechnical Design Manual

- 1.11.3.5 - 12; 1.10.5.5.1; 1.17.2.6; 1.17.8.2
Revised design and detailing requirements for transverse reinforcement in columns and drilled shafts.
- 1.12.5 Reformatted to two columns.
- 1.13.3 Revised requirements for materials at bridge expansion joints in bridge rail based on joint width.
- 1.13.8 Added guidance for Bridge Maintenance projects that involve bridge rail work.
- 1.13.9 Added guidance for details when addressing non-standard rail transitions.
- 1.17.2.9 Revised seismic design criteria for diversion structures.

Section 2 – Processes

- 2.5 Changed ODOT internal QC process to include back checking and QC stamp.
- 2.8 Provided guidance on scoping process and tools.






2024_Letter_for_Final_Revisions_to_BDM

Final Audit Report

2024-10-29

Created:	2024-10-29 (Pacific Daylight Time)
By:	Yadira MENDOZA (Yadira.MENDOZA@odot.oregon.gov)
Status:	Signed
Transaction ID:	CBJCHBCAABAAPeMwXTsvPLRlaerT02sDFGEz3C3GfcqE

"2024_Letter_for_Final_Revisions_to_BDM" History

-  Document created by Yadira MENDOZA (Yadira.MENDOZA@odot.oregon.gov)
2024-10-29 - 1:51:47 PM PDT - IP address: 167.131.0.194
-  Document emailed to Raymond BOTTENBERG (Raymond.D.BOTTENBERG@odot.oregon.gov) for signature
2024-10-29 - 1:55:45 PM PDT
-  Email viewed by Raymond BOTTENBERG (Raymond.D.BOTTENBERG@odot.oregon.gov)
2024-10-29 - 1:58:49 PM PDT - IP address: 104.47.64.254
-  Document e-signed by Raymond BOTTENBERG (Raymond.D.BOTTENBERG@odot.oregon.gov)
Signature Date: 2024-10-29 - 1:59:12 PM PDT - Time Source: server- IP address: 167.131.0.194
-  Agreement completed.
2024-10-29 - 1:59:12 PM PDT